



# Standards-Based Education and Student Report Cards

Peter Robertson



# Objectives for today's session

- **Explore the full implications of standards for the student report card and teacher grading practices**
- **Discuss practical ways to integrate standards-based instruction with student-involved classroom assessment, and grading and reporting practices to improve teaching and learning.**
- **Review one strategy for using grading practices to keep the focus on standards-based education in an era of high-stakes testing.**
- **Encourage school-based and/or district-based study groups to explore effective student-led classroom-based assessment practices and their implications for grading and reporting.**



# Outline of today's session

- **Why standards-based grading matters**
- **Standards-based grading “don’ts”**
- **Building a standards-based grading system**
- **Progress versus achievement**
- **Keeping anchored in a sea of testing**

# The purpose of *No Child Left Behind...*



**“Ensure that all children have a fair, equal, and significant opportunity to obtain a high-quality education and reach, at a minimum, proficiency on challenging state academic achievement standards and state academic assessments.”**

# ...reinforces the changing role of our schools



**FROM:**

**Sorting students**

**Emphasis on what's  
taught**

**School success  
doesn't predict  
life-long earnings**

**TO:**

**Educating all students**

**Emphasis on what's  
learned**

**School success  
does predict  
life-long earnings**

# **Clear standards and quality assessment foster equity**



## **Implicit standards foster inequity**

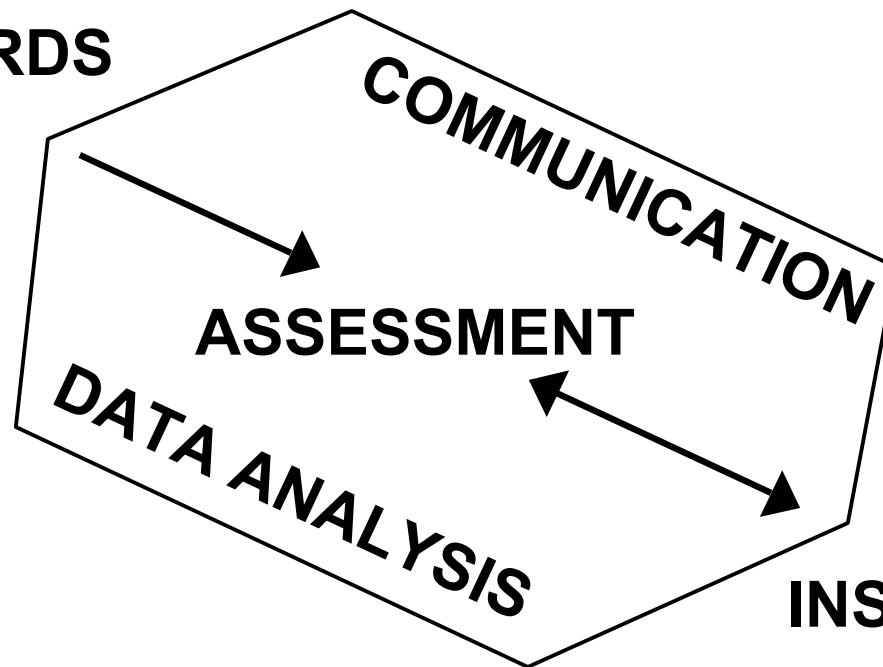
- **Literacy tests used to deny voting rights**
- **Hiring bias hidden in vague job requirements**
- **Lending inequity resulting from informal practices**
- **Educational access blocked by admission, grading, and promotion standards**

**Quality assessment makes standards clear, and provides data on what's been learned**

# All accountability & improvement systems say the same thing

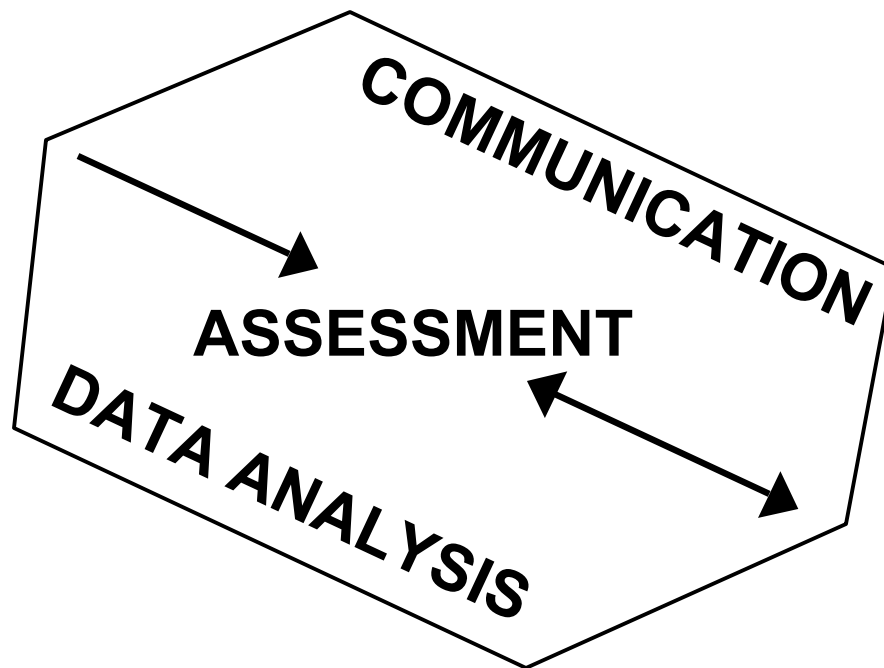


**STANDARDS**



**INSTRUCTION**

# Formative and summative grading is the core of these systems



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**Descriptive  
Feedback**

**Grading &  
Reporting**





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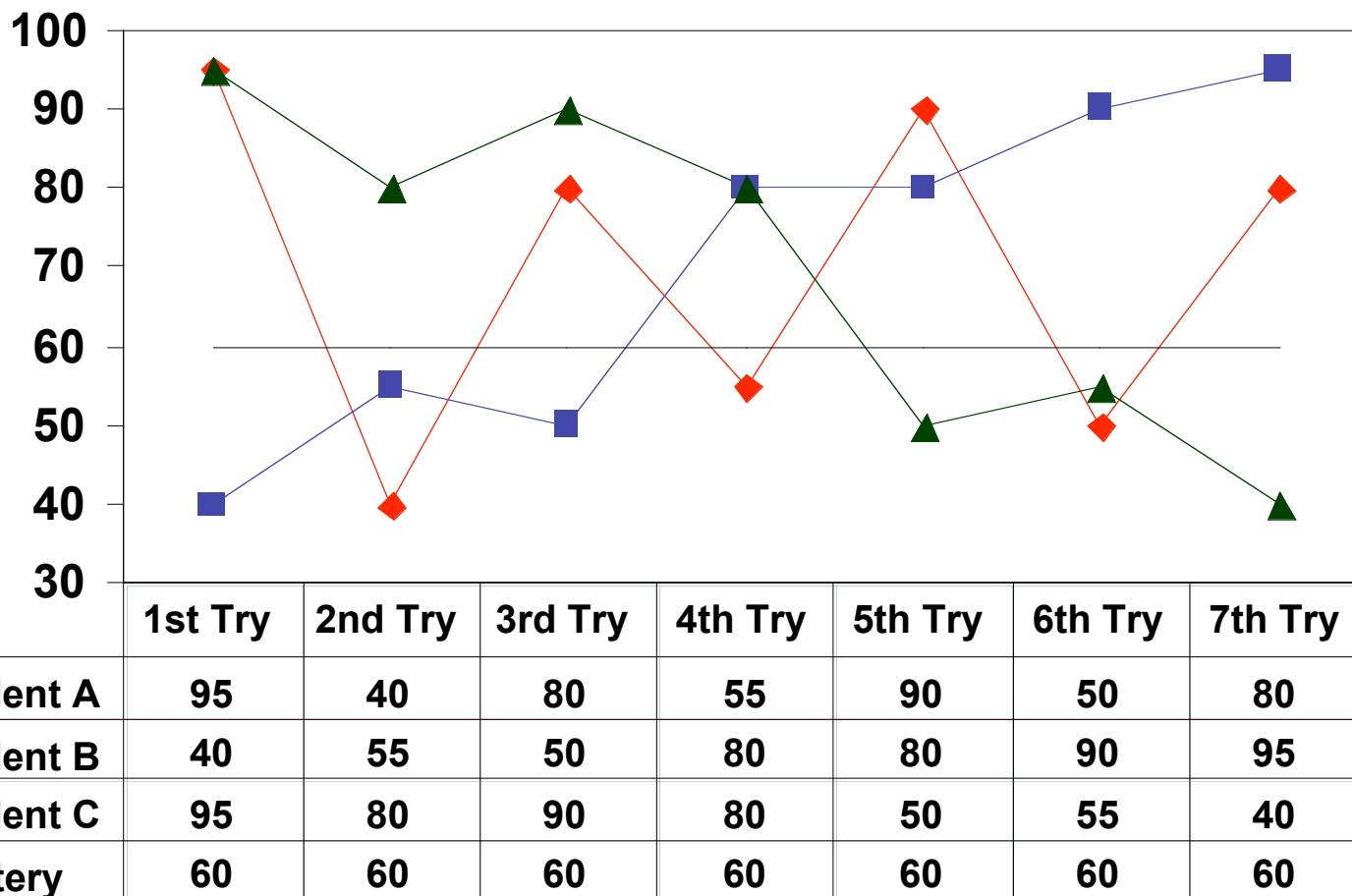
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# Standards-based grading “don’ts”



- **Grading on a curve – Are you teaching or sorting?**
- **Implied or emergent expectations – When did you first draft the final exam?**
- **All assessment tasks and/or scores are equal – How do you treat first efforts?**
- **Including non-achievement factors – How can you give that trouble-maker an “A?”**
- **A composite, averaged course score – How valid is “Peter got 83%?”**

# Which student would you choose to pack your parachute?



Adapted from How to Grade for Learning (O'Connor, 2002)

# Discussion questions for the parachute packing case



- 1. Which student will you choose to pick your parachute? Why?**
- 2. If these were scores in a typical teacher's grade book, which students would pass? Which students would fail?**
- 3. Is there any discrepancy between your answers to questions 1 and 2? If so, why does this discrepancy occur?**
- 4. What are the implications of this for the way you calculate student grades?**

# If this is the grade book data for this student, what's his grade?



Learning Outcome	Weight for all scores	Summative Assessments (all have rubric scores of 1 – 4, chronological order)				
		#1	#2	#3	#4	#5
#1	15%	3	3	3	3	3
#2	25%	4	4	4	1	4
#3	15%	1	2	3	4	4
#4	10%	3	2	3	2	3
#5	25%	4	3	4	3	4
#6	10%	2	2	2	1	2

Adapted from How to Grade for Learning (O'Connor, 2002)

# Discussion questions for calculating the student grade



- Adding up all scores yields a total/ possible of 86/120 or 71.7%. Is that the right basis for the grade?
- Adding up scores for each learning goal and weighting yields 76.5%. Is that the right basis for the grade?
- Are numerical calculations necessary?
- Should averages be used? Medians? Modes? How to handle trends over time?
- What should be reported out? Overall grade? Outcome scores? Progress or achievement?



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# Building a standards-based grading system



- **Build “assessment pacing guide” from academic standards and course expectations**
- **Outline assessment plan: assessment types, formative/summative balance, sampling plan, reference tasks, other tasks, timing, and task weighting**
- **Share plan, record-keeping system, and general principles with students & parents**
- **Analyze results, communicate, and adjust as you go**



# Build “assessment pacing guide” from standards



CMSD 4 <sup>th</sup> Grade Math Report Card Course Outcomes	Q1	Q2	Q3	Q4
Uses a variety of strategies to solve problems; communicates math ideas (1)	Y	Y		?
Uses place value to read, write, represent, compare numbers (2)	Y			?
Identifies and generates equivalent forms of fractions and decimals		Y		Y
Models operation properties and relationships; uses models and words to describe patterns and relationships in computation (3)	Y	Y	Y	Y
Demonstrates fluency in basic facts, counting, changing money (4)	Y	Y		?
Estimates/measures length, weight, volume, temperature, time, money, area, perimeter		Y	Y	?
Describes, classifies, compares, and models triangles and 2D and 3D shapes			Y	?
Identifies and models points, lines, planes, ordered pairs, transformations			Y	?
Graphs, interprets, predicts, analyzes, draws conclusions about data		Y		?
Conducts and interprets simple probability experiments		Y		?

# Outline Assessment Plan



Outline of Assessment Plan for 1 <sup>st</sup> Quarter, 4 <sup>th</sup> Grade Math	O1	O2	O3	O4
Diagnostic assessment: Number, Number Sense, Operations	F	F	F	F
Mathematical inventory of my world	FS	FS		FS
Short-cycle assessment on place value and estimation (on-demand)		S		S
Real world problems independent project	S		S	
Short-cycle assessment on decomposing and computation		S	S	S
Mathematics journal sample	FS	FS	FS	FS
Short-cycle assessment on problem-solving & mathematical tools	S		S	S
Diagnostic assessment on variables and algebraic concepts	F		F	
Student presentations	S	?	?	?
End of quarter exam (NAEP reference items, on-demand)	S	S	S	S

F is formative, S is summative, FS is both – only the final draft is scored for grading



# Keep good records of student results, including:

- **Assignment description (name, type, whether used for grading, scoring method, target score, timing)**
- **Standards/outcomes assessed**
- **Student specific results by assignment and outcome/standard**



**NOTE: This is 3 dimensions, more than regular grade books easily handle. Electronic grade books are recommended.**

# Some examples of standards-based grade book programs



■ MarkBook	<a href="http://markbook.com">markbook.com</a>
■ GradeQuick	<a href="http://jacksonsoftware.com">jacksonsoftware.com</a>
■ Grade Machine	<a href="http://mistycity.com">mistycity.com</a>
■ GradeBook2	<a href="http://excelsiorsoftware.com">excelsiorsoftware.com</a>

**NOTE:** This list is not based on product evaluations, and the options are constantly changing. If your district does not have a grade book, use a search engine to explore “standards-based grade books.”

# Share the plan, records, and process in age appropriate way



- **Share the assessment plan upfront with students and parents**
- **Make examples of student work available where possible**
- **Build assessment rubrics and other scoring guidelines with students**
- **Share feedback and scores with students and encourage them to keep records**
- **Explain the process and principles to students and, where necessary, discuss**

# Summary guidelines for standard-based grading



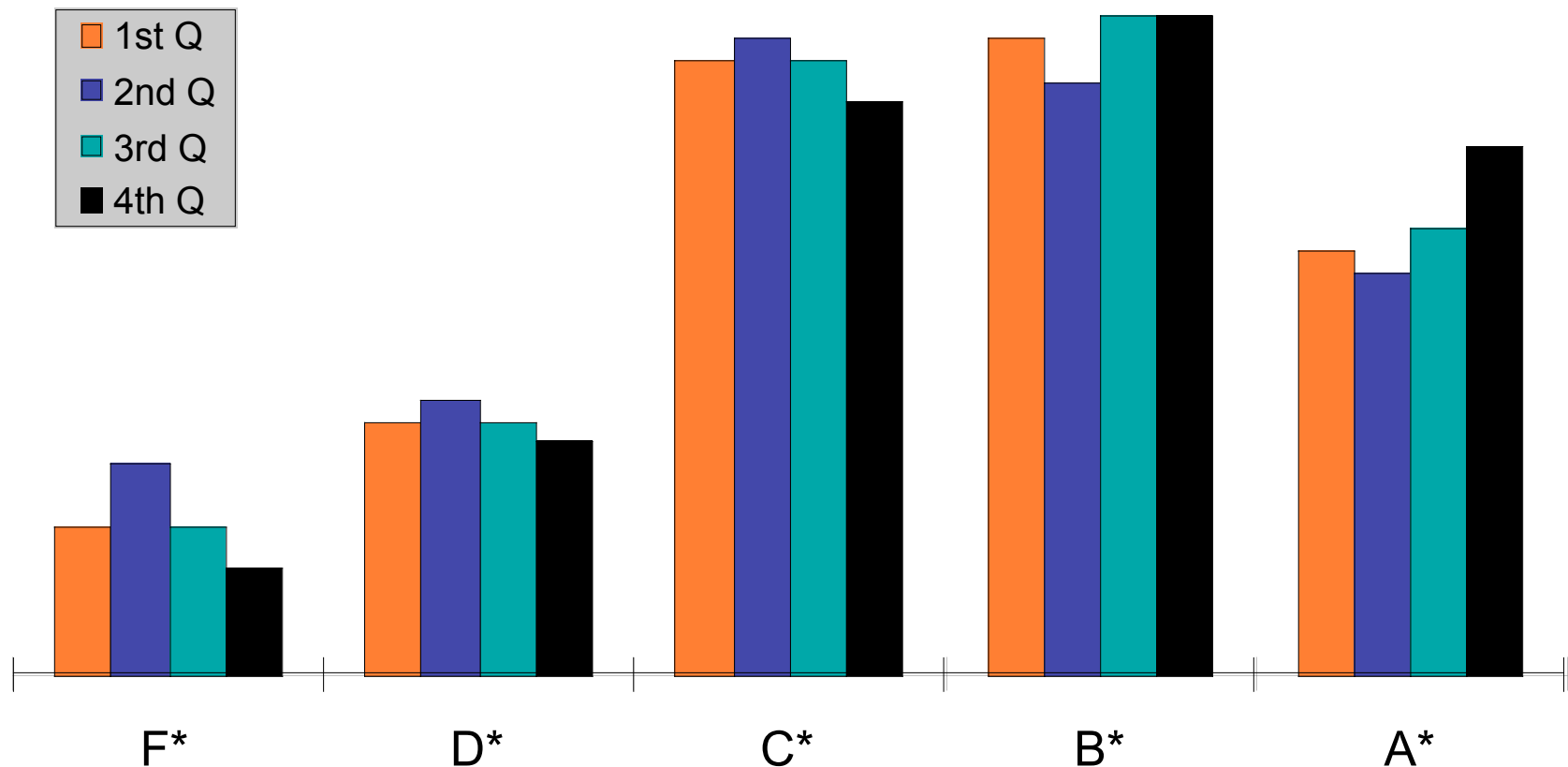
- **Grades must relate to academic standards and course expectations**
- **Public criteria and student work examples are reference points for grading**
- **Grades should be based only on individual academic achievement**
- **Sample student performance – do not include all scores in grades**
- **Keep records that can be updated easily**
- **Crunch numbers carefully – if at all**
- **Use quality assessments and properly recorded achievement evidence**



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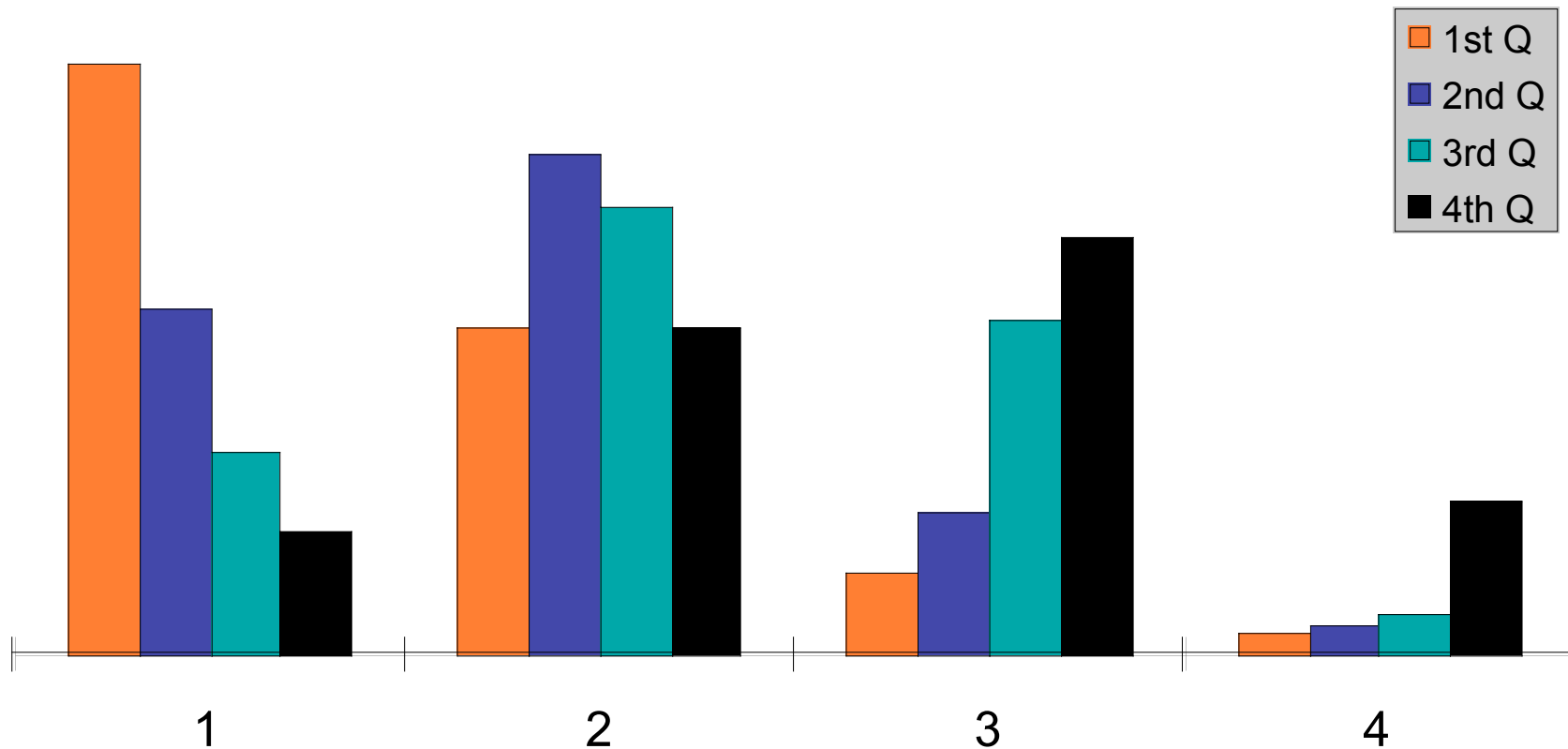
# Grades indicate relative progress, so distribution stays steady all year



\* This includes the “grades” of 1<sup>st</sup> graders: (U)nsatisfactory, (N)eeds improvement, (S)atisfactory, (G)ood, and (E)xcellent



# Outcomes indicate absolute achievement, so distribution changes



# This report card shows both progress and achievement



MATH GR-4 (ME4RNA)	A	A	A
Uses a variety of strategies to solve problems; communicates math ideas	1	3	4
Uses place value to read, write, represent, compare numbers	1	4	4
Identifies and generates equivalent forms of fractions and decimals	1	3	4
Models operation properties and relationships; uses models and words to relationships in computation	1	3	4
Demonstrates fluency in basic facts, counting and changing money	1	4	4
Estimates/measures length, wt., volume, temp., time, money, area, perimeter	1	4	4
Describes, classifies, compares, and models triangles and 2D and 3D shapes	1	4	4
Identifies and models points, lines, planes, ordered pairs, transformations	1	3	4
Graphs, interprets, predicts, analyzes, draws conclusions about data	1	4	4
Conducts and interprets simple probability experiments	1	4	4

# What's going on here?



## MATH GR-4 (ME4RNA)

	C	D	F
Uses a variety of strategies to solve problems; communicates math ideas	1	1	2
Uses place value to read, write, represent, compare numbers	1	1	2
Identifies and generates equivalent forms of fractions and decimals	NA	NA	1
Models operation properties and relationships; uses models and words to c relationships in computation	1	1	2
Demonstrates fluency in basic facts, counting and changing money	1	1	2
Estimates/measures length, wt., volume, temp., time, money, area, perimete	1	1	2
Describes, classifies, compares, and models triangles and 2D and 3D shap	NA	1	2
Identifies and models points, lines, planes, ordered pairs, transformations	1	1	2
Graphs, interprets, predicts, analyzes, draws conclusions about data	1	1	2
Conducts and interprets simple probability experiments	1	NA	2



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# Example of anchoring report cards to test scores: 4<sup>th</sup> Reading, Oct. '02



## Outcome Indicator

4OPT Level		1	2	3	4
	Advanced	0%	1%	0%	
	Proficient	8%	10%	2%	0%
	Basic	21%	13%	2%	0%
	Below Basic	36%	7%	1%	

%

The course outcome (“Comprehends beyond literal understanding to examine, predict, infer”) and proficiency scores in these boxes are considered to be “aligned” (70% of 5,615 students for whom we have a matched pair)

# Example of anchoring report cards to test scores: 3<sup>rd</sup> Reading, Mar. '03



<u>Average course outcome</u>	<u>% Proficient</u>
Less than 2	10%
2 to 3	41%
More than 3	70%



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# Some of the tools for implementing standards



<b>Standards (Courses)</b>	Grade-specific performance indicators K–12 course catalog, with course outcomes mapped to standards Assessment pacing guide for courses
<b>Assessments</b>	Aligned state/district assessment system Classroom assessments for courses Student work examples & “scoring camps”
<b>Instruction</b>	Lesson plans mapped to classroom assessments
<b>Communication Analysis</b>	Standards-based grades & report cards Student-specific assessment & related data Measures of report card “inter-rater reliability”



# A “Theory of Action” context for this work



**Assessment *of* learning vs. assessment *for* learning (Stiggins, 2002).**

**Assessments *for* learning are what students need to clarify educational goals, focus constructive feedback, and demonstrate students progress. Good classroom-based assessment improves performance more than other interventions (Black & Wiliam, 1998).**

**We are trying to cut through the high-stakes testing distractions of NCLB by using student grades to link assessment *for* learning to accountability.**

# A few resources for broader and deeper conversations



- Resnick, Lauren; *Principles of Learning CD-ROM*; Institute for Learning
- Stiggins, Richard J.; *Student-involved Classroom Assessment*; Prentice-Hall, NJ; 2001
- O'Connor, Kenneth; *How to Grade for Learning*; SkyLight Professional Development; Arlington Heights, IL; 2002
- Marzano, Robert J.; *Transforming Classroom Grading*; ASCD.org